

AO 120 (Rev. 3/04)

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
---	---

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Atlanta Division on the following Patents or Trademarks:

DOCKET NO. 1:09-cv-1098-BBM	DATE FILED 4/24/2009	U.S. DISTRICT COURT Atlanta Division
PLAINTIFF		DEFENDANT
Optimum Processing Solutions, L.L.C.		Advanced Micro Devices, Inc. et al
PATENT OR TRADEMARK NO. DATE OF PATENT OR TRADEMARK HOLDER OF PATENT OR TRADEMARK		
1 5,115,497	5/19/1992	Larry A. Bergman
2		
3		
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY	<input type="checkbox"/> Amendment	<input type="checkbox"/> Answer	<input type="checkbox"/> Cross Bill	<input type="checkbox"/> Other Pleading
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK			
1					
2					
3					
4					
5					

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT		
CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy



US003115497A

United States Patent [19]

Bergman

[11] Patent Number: 5,115,497
 [45] Date of Patent: May 19, 1992

[34] OPTICALLY INTRACONNECTED COMPUTER EMPLOYING DYNAMICALLY RECONFIGURABLE HOLOGRAPHIC OPTICAL ELEMENT

[75] Inventor: Larry A. Bergman, Van Nuys, Calif.

[73] Assignee: California Institute of Technology, Pasadena, Calif.

[21] Appl. No.: 103,192

[22] Filed: Oct. 1, 1987

[51] Int'l. Cl. G06F 9/00

[52] U.S. Cl. 365/37B; 364/DIG. 1;
 364/232; 364/261; 364/261.1; 364/263.1;

364/262.4; 364/262.9; 364/264

[58] Field of Search ... 364/200 MS File, 900 MS File,
 364/736, 741

[56] References Cited

U.S. PATENT DOCUMENTS

3,916,383	10/1973	Malcolm	364/200
4,136,383	1/1979	Takeue	364/210
4,172,281	10/1979	Gordon	364/200
4,332,008	5/1982	Shima et al.	364/200
4,342,082	7/1982	Brown et al.	364/200
4,384,324	5/1983	Kim et al.	364/200
4,395,738	7/1983	Helenius et al.	364/200
4,454,578	6/1984	Mitsumoto et al.	364/200
4,641,275	2/1987	Hatakeyama et al.	364/900
4,705,344	11/1987	Hilson et al.	350/173
4,811,210	3/1989	McAulay	364/200
4,831,319	5/1989	Morgan	364/200
4,899,012	8/1989	Cole	350/94.24

OTHER PUBLICATIONS

Wu, W. H. et al., "Implementation of Optical Interconnections for VLSI", *IEEE Transactions on Electron Devices*, vol ED-34, No. 3, Mar. 1987, pp. 706-126.

Bergman, L. A. et al., "Holographic Optical Interconnects For VLSI", *Optical Engineering*, vol. 25, No. 10, Oct. 1986, pp. 1109-1118.

Primary Examiner—Kevin A. Krieg
 Attorney, Agent or Firm—Edward O. Ansell

[37] ABSTRACT

An optically intraconnected computer and a reconfigurable holographic optical element employed therein. The basic computer comprises a memory for holding a sequence of instructions to be executed; logic for accessing the instructions in sequence; logic for determining for each the instruction the function to be performed and the effective address thereof; a plurality of individual elements on a common support substrate optimized to perform certain logical sequences employed in executing the instructions; and, element selection logic connected to the logic determining the function to be performed for each the instruction for determining the class of each function and for causing the instruction to be executed by those the elements which perform those associated the logical sequences affecting the instruction execution in an optimum manner. In the optically intraconnected version, the element selection logic is adapted for transmitting and switching signals to the elements optically.

35 Claims, 4 Drawing Sheets

